

REMARKS

This Amendment is submitted in reply to the non-final Office Action mailed on April 2, 2007. A petition for a one month extension of time is submitted herewith. The Director is authorized to charge \$120.00 for the extension of time and any additional fees which may be required, or to credit any overpayment to Deposit Account No. 02-1818. If such a withdrawal is made, please indicate the Attorney Docket No. 112713-1000 on the account statement.

Claims 1, 3, 5, 21-23, 25-28, 30, 37-39, 41-42, 44-47, 49-51, 57-58 and 77-80 are pending in this application. Claims 2, 10-20, 35, 48, 56 and 59-76 were previously cancelled. Claims 4, 6-9, 24, 29, 31-34, 36, 40, 43, and 52-55 were previously withdrawn. In the Office Action, Claims 1, 3, 5, 21-23, 25-28, 30, 37-39, 41-42, 44-47, 49-51, 57-58 and 77-80 are rejected under 35 U.S.C. §103. In response Claims 1, 21, 41 and 51 have been amended. This amendment does not add new matter. In view of the amendment and/or for the reasons set forth below, Applicants respectfully submit that the rejections should be withdrawn.

Claims 1-2, 5, 11-12 and 15 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,549,552 to Peters et al. (*Peters*) in view of U.S. Patent Publication No. 2002/0100540 to Savitski et al. ("*Savitski*"). Claims 1, 5, 11, 15, 21, 26-28, 30, 35, 41, 45-47 and 51 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2003/0201059 to Holman et al. ("*Holman*") in view of *Savitski*. Claims 1, 3, 5, 11-13, 15, 21, 26-28, 30, 35, 37-38, 41-42, 45-51 and 56-58 are rejected under 35 U.S.C. §103(a) as being unpatentable over *Peters* in view of *Savitski*, *Holman* and the publication ANTEC 2000 Plastics ("*ANTEC*"). Claims 21-23 and 39 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Holman* in view of U.S. Patent No. 4,340,097 to Ammann et al. ("*Ammann*"). Applicants respectfully traverse and disagree with these rejections for at least the reasons set forth below.

Independent Claims 1, 21, 41 and 51 have been amended to recite, in part, a first article of a polymeric material selected from the group consisting of high melt strength polypropylene, styrene-ethylene-butene-styrene block co-polymer, ultra low density polyethylene, very low density polyethylene, polybutadiene and combinations thereof. Independent Claims 1, 21, 41 and 51 have been amended to recite, in part, a second article of a polymeric material selected from the group consisting of high melt strength polypropylene, styrene-ethylene-butene-styrene block co-polymer, ultra low density polyethylene, very low density polyethylene, polybutadiene and combinations thereof. The amendments are supported in the specification, for example, at page 7, line 1 to page 12, line 32.

In alternative embodiments, the high melt strength polypropylenes are a homopolymer or copolymer of polypropylene having a melt flow index within the range of 10 grams/10 min. to 800 grams/10 min., more preferably 30 grams/10 min. to 200 grams/10 min., or any range or combination of ranges therein. High melt strength polypropylenes are known to have free-end long chain branches of propylene units. VLDPE (very low density polyethylene) or ULDPE (ultra low density polyethylene) typically have a density as measured by ASTM D-792 of less than about 0.915 g/cc and more preferably less than about 0.910 g/cc and even more preferably less than about 0.900 g/cc. Suitable polybutadienes include the 1,2- and 1,4-addition products of 1,3-butadiene (e.g. these shall collectively be referred to as polybutadienes). The selected polymeric materials provide for a first article and a second article that can be achieve a high bonding strength using the IR sealing techniques in accordance with the present claims. In contrast, Applicants respectfully submit that, even if combinable, the cited references fail to disclose or suggest every element of the present claims.

Peters, Savitski, Holman, ANTEC and *Ammann*, either alone or in combination, fail to disclose or suggest a first article of a polymeric material selected from the group consisting of high melt strength polypropylene, styrene-ethylene-butene-styrene block co-polymer, ultra low density polyethylene, very low density polyethylene, polybutadiene and combinations thereof as required, in part, by Claims 1, 21, 41 and 51. In addition, *Peters, Savitski, Holman, ANTEC* and *Ammann*, either alone or in combination, fail to disclose or suggest contacting the first article at an interface with a second article of a polymeric material selected from the group consisting of high melt strength polypropylene, styrene-ethylene-butene-styrene block co-polymer, ultra low density polyethylene, very low density polyethylene, polybutadiene and combinations thereof as required, in part, by Claims 1, 21, 41 and 51. Moreover, none of the cited references even recognize the advantages, benefits and/or properties of applying infrared exposure to bond the first article and the second article comprising the selected polymeric materials at their interface in accordance with the present claims, which produces strong, long-lasting bonds between the first article and the second article.

For at least the reasons discussed above, even if combinable, the cited references do not teach, suggest, or even disclose all of the elements of independent Claims 1, 21, 41 and 51 and Claims 3, 5, 22-23, 26-28, 30, 37-39, 42, 45-47, 49-50, 57-58 and 77-80 that depend from Claims 1, 21, 41 and 51, and thus, fail to render the claimed subject matter obvious.

Claims 25 and 44 were rejected under 35 U.S.C. §103(a) as being unpatentable over *Peters* in view of *Savatski*, *Holman* and *ANTEC*. Applicants respectfully submit that the patentability of Claims 21 and 41 as previously discussed renders moot the obviousness rejection of Claims 25 and 44 that depend from Claims 21 and 41. In this regard, the cited art fails to teach or suggest the elements of Claims 25 and 44 in combination with the novel elements of Claims 21 and 41.

Accordingly, Applicants respectfully request that the obviousness rejections with respect to Claims 1, 3, 5, 21-23, 25-28, 30, 37-39, 41-42, 44-47, 49-51, 57-58 and 77-80 be reconsidered and the rejections be withdrawn.

For the foregoing reasons, Applicants respectfully request reconsideration of their patent application and earnestly request an early allowance of same.

Respectfully submitted,

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